

Dedication

I dedicate this research with much love and appreciation;

To the candles of my lives. My beloved mother who have always been there for me.

To my father who have always been the brick walls on whom me can learn and depend on forever.

To my brothers and sister who mean the world to me.

To my friends, family, colleagues and teachers in the Past and presents and to everyone that touch my heart.

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ABSTRACT

This research in metro train movements which are used in most of the developed countries. This metro train is equipped with a controller that enables the automatic operation of the metro train from station to station. This research development process of a prototype for a metro train implemented using a atmega32 microcontroller. Simulation for the system's circuits is done with the aid of Proteus software. The hardware circuits, which are built on printed circuit boards (PCB), are interfaced with actuators and sensors for automation purposes. The hardware is assembled in a toy-like prototype train. The Bascom programming language is used for programming the microcontroller.

atmega32

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Proteus

IR

. atmega32

Bascom

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